INSTRUCTIONS-PARTS LIST 308–610

Rev. A

INSTRUCTIONS

This manual contains important warnings and information.
READ AND KEEP FOR REFERENCE.
See manual 308–341 for complete gun warnings and instructions.

Optimiser 2K™ Upgrade Kit

Part No. 238–216

For use with the Optimiser 2K™ Spray Gun, Part No. 949–239

Pressure Relief Procedure

⚠ WARNING

PRESSURIZED EQUIPMENT HAZARD
The equipment stays pressurized until pressure is manually relieved. To reduce the risk of serious injury from pressurized fluid, accidental spray from the gun, or splashing fluid, follow this procedure before cleaning or servicing the gun and whenever you are instructed to relieve pressure.

1. Close the adhesive and activator shut-off valves.
2. Trigger the gun into the spray booth* to relieve the fluid pressures and clear excess activator from the gun.

* *If the gun has been flushed with solvent, be sure to spray the solvent into a grounded metal waste container.*

3. Close the atomizing air shut-off valve.

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Installation

Disassembly

NOTE: The reference letters marked with an asterisk (for example, Y*) in the text and Fig. 1, should be discarded and replaced with the parts from the kit. See the parts list, page 4, for the parts included with the kit.

1. Flush and clean the gun as instructed in the spray gun manual 308–341, included with the kit.
2. Follow the **Pressure Relief Procedure** on the cover.
3. Remove the air cap (Y*) from the gun. See Fig. 1.
4. Remove the gun and activator triggers (A, B).
5. Push on the tube connector (C) and disconnect the tube (D*).
6. Remove the two screws (E) from the activator inlet housing (F).
7. Remove and disassemble the activator valve (G).

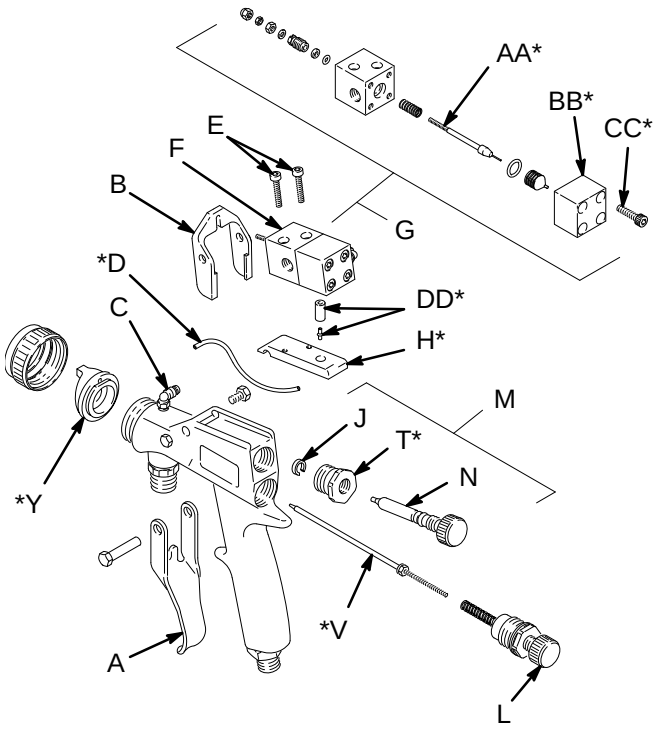


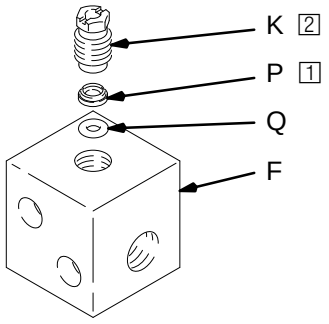
Fig. 1 05879

8. Remove the plate (H*) from the gun.
9. Remove the fan air valve assembly (M). Remove the retaining ring (J) and adjustment nut (T*) from the air valve (N).
10. Remove the fluid adjustment knob (L). Pull the needle (V*) out of the gun body.
11. Discard the parts being replaced. Clean the remaining parts in soapy water.

Installing the Kit

NOTE: See Fig. 3 for torques and other assembly notes.

1. Assemble the activator valve (G), using the kit parts (1, 8, 11).
   a. Make sure the thin end of the needle (11) is straight to avoid scratching the nozzle.
   b. Install the o-ring (Q), spreader (P), and activator packing nut (K) into the activator inlet housing (F). See Fig. 2.



1 Spreader (P) taper faces away from o-ring (Q)
2 Tighten packing nut (K) to 20 in-lbs (2.3 N•m)

Fig. 2 02781A

   c. Assemble the remaining valve parts.
   d. Secure the activator housings (8, F) with the four stainless steel screws (1).

⚠ CAUTION

To avoid damaging the threads, do not over-tighten the screws (1).

Installation

Installing the Kit (continued)

2. Install the restrictor (6), flat side up, into the activator outlet housing (8).

3. Place the o-ring (9) in the groove in the activator outlet housing (8). Lightly lubricate the o-ring.

4. Secure the activator valve (G) to the plate (7) with the two screws (E).

5. Place the o-ring (9) in the groove on the plate (7). Lightly lubricate the o-ring, and slide the plate, with the activator valve assembly, onto the top of the gun body.

6. Install the gun and activator triggers (A, B) with the pivot pin (S) and screw (R).

7. Install the needle (5) into the gun body, then install the fluid adjustment knob (L) and spring (X).

8. Pull back the trigger (A) until the activator valve starts to open. Tighten the two hex nuts on the activator needle so that both fluid valves open together.

9. Install the adjustment nut (4) and the retaining ring (J) on the air valve (N). Install the air valve assembly into the gun body.

10. Connect the tube (2).

11. Install the air cap (10), and secure it with the retaining ring (W).

[1] Lightly lubricate.
[2] Lightly lubricate contact area on trigger (B) face.
[3] Tighten to 25–35 in-lbs (2.8–4.0 N•m).
[4] Tighten to 1–5 in-lbs (0.1–0.6 N•m).
[5] Tighten to 10–15 in-lbs (1.1–1.7 N•m).
[6] Tighten to 20 in-lbs (2.3 N•m).
[7] Tighten to 5 in-lbs (0.6 N•m).

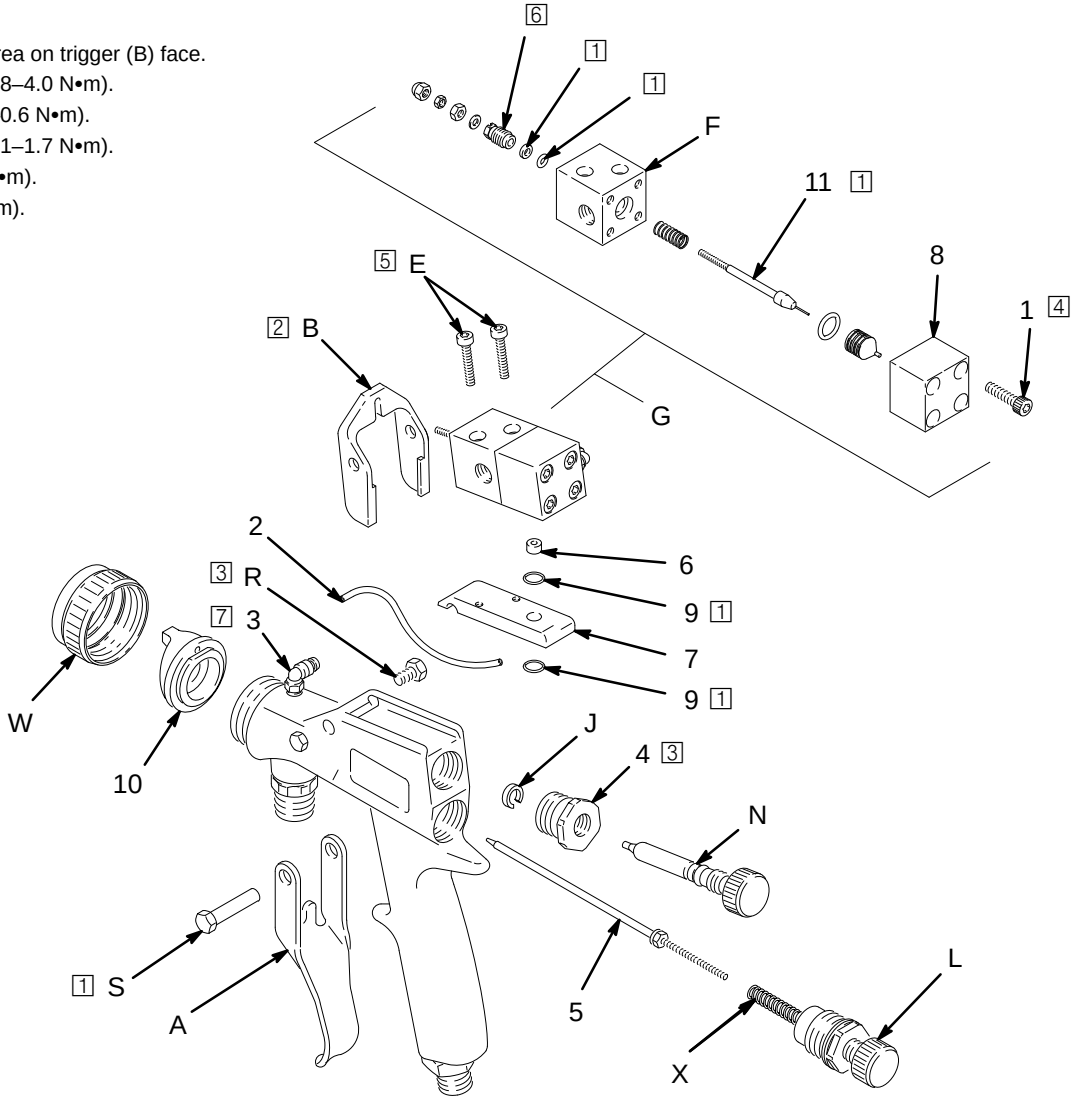


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Fig. 3

Parts

Part No. 238–216
Includes items 1 to 12. Refer to Fig. 3, page 3.

Ref. No.	Part No.	Description	Qty.
1	113–411	SCREW, cap, SST; 10–24 x 3/4 in.	4
2	187–169	TUBE; nylon; 5/32 in. (3.97 mm) O.D.	1
3☆	514–581	CONNECTOR, tube	2
4	188–700	NUT, air adjustment	1
5	238–218	FLUID NEEDLE ASSY.; 0.055 in. (1.397 mm) size	1
6	191–015	RESTRICTOR, orifice	1
7	190–247	PLATE, gun	1
8	625–730	HOUSING, activator outlet	1
9	106–555	O-RING; Viton®	2
10	185–794	AIR CAP; 0.020–0.055 in. (0.508–1.397 mm) size	1
11	949–295	NEEDLE ASSY., activator valve	1

☆ *The tube connectors are included as spare parts. They do not need to be installed with the other kit parts. In general, replace the tube connectors after 6 months of usage.*

Graco Phone Number

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